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NPIC/R-81/64

February 1964

PHOTOGRAPHIC INTERPRETATION REPORT

SA-1 SAM SITES, MOSCOW, USSR NORTHWEST QUADRANT



CIA



DIA

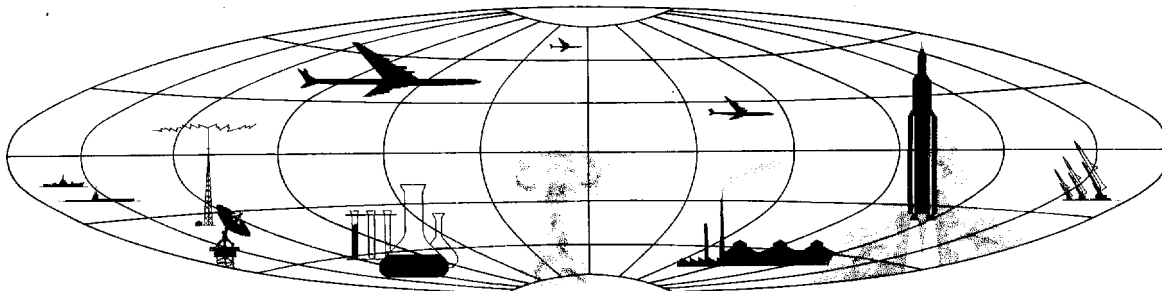
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WARNING

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NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



TOP SECRET

GROUP 1
Excluded from automatic
downgrading and declassification

PHOTOGRAPHIC INTERPRETATION REPORT

SA-1 SAM SITES, MOSCOW, USSR
NORTHWEST QUADRANT

NPIC/R-81/64

February 1964

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

TOP SECRET RUFF

PREFACE

In order to provide a foundation for the continuing analysis of Moscow air defenses, a detailed survey of KEYHOLE photography of SA-1 SAM sites surrounding the city has been undertaken under NPIC Project JN-212/62. This report, a partial answer to CIA requirement C-RR3-80375, covers the sites in the northwest quadrant (Figure 1). The sites in the northeast quadrant are covered in NPIC/R-64/64; in the southeast quadrant, in NPIC/R-90/64; and in the southwest quadrant, in NPIC/R-71/64.

For each site a photograph is provided, significant changes since the first KEYHOLE coverage are noted, and all KEYHOLE photographic coverage through [REDACTED] is listed. All map references are to US Air Target Charts (USATC), Series 200, second edition.

25X1D

NPIC/R-81/64

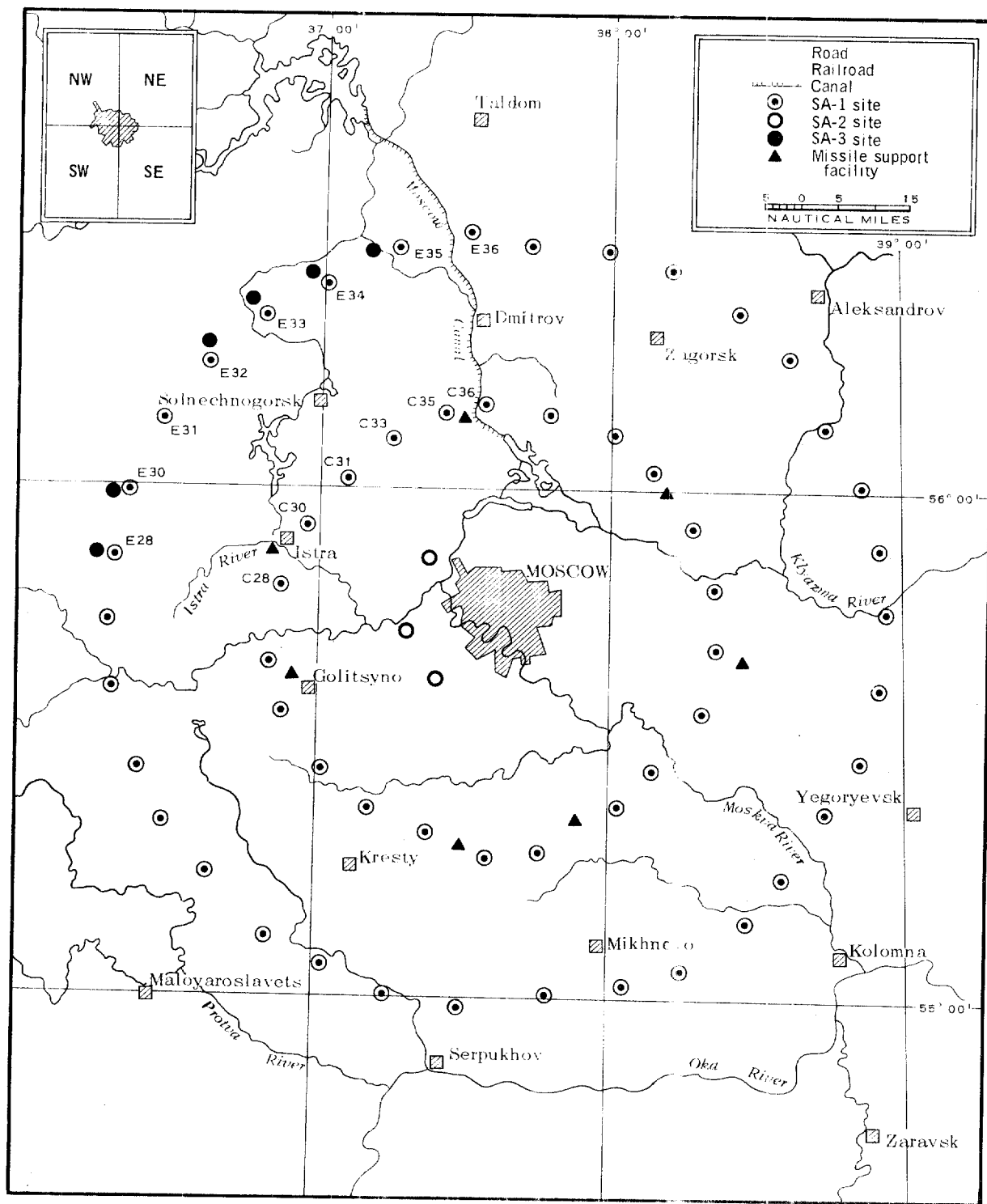


FIGURE 1. LOCATION MAP.

NPIC H-7019 (1/76)

TOP SECRET RUFF

NPIC/R-81/64

MOSCOW SAM SITE C28-1

25X1A

NPIC Target No: 0167-121-M

Coords: 55-49N 36-52E

25X1D

Map Ref: DIA Sheet 0167-4HL, Mar 63 (S)

First KEYHOLE coverage:

25X1D

Status then: undetermined because of haze and darkness

25X1D

The first clear coverage of the site on KEY-HOLE photography was in [REDACTED] at which time the site was complete. At that time, a

separate secured storage area (Figure 2, Item 1) was observed containing 14 buildings, of which 9 are drive-through missile checkout/storage buildings 310 by 100 feet and 5 are support-type buildings. A rail spur connecting this installation with the Istra SAM Storage Site [REDACTED]

[REDACTED] was observed under construction in [REDACTED] and had been completed by [REDACTED]

No other apparent changes were observed at the site between [REDACTED] [REDACTED]

25X1A

25X1A

25X1D

25X1D

25X1D

25X1D

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)

25X1D

NPIC/R-81/64

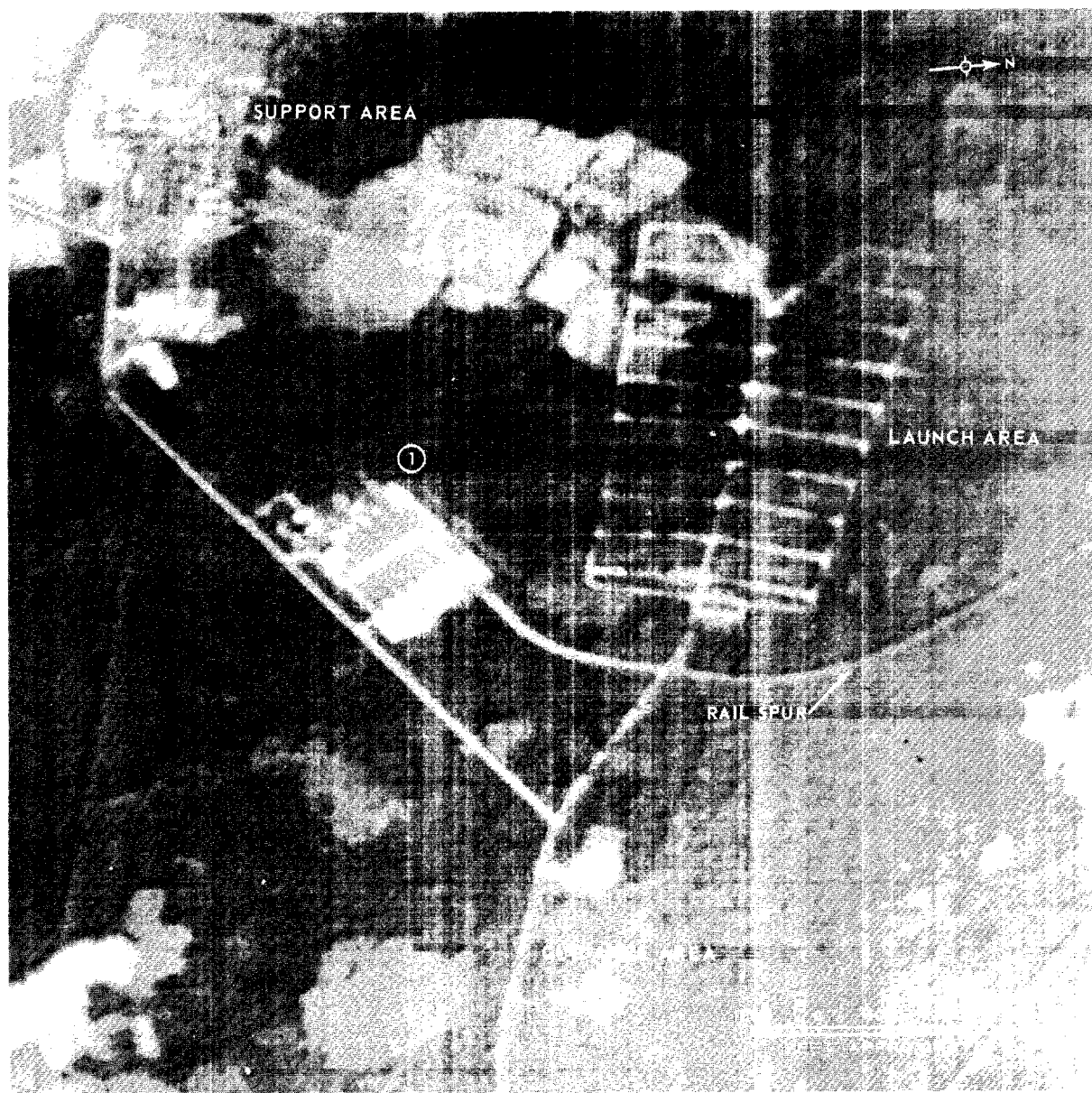


FIGURE 2. MOSCOW SAM SITE C28-1

NPIC H-7020 (1/64)

25X1D

- 2 -

TOP SECRET RUFF

MOSCOW SAM SITE C30-1

25X1A

[REDACTED]
NPIC Target No: 0167-121-N

Coords: 55-56N 36-55E

Map Ref: DIA Sheet 0167-4HL, Mar 63 (S)

First KEYHOLE coverage: [REDACTED]

25X1D

25X1D

Status then: undetermined because of haze and darkness

The first clear coverage of the site on KEY-HOLE photography was in [REDACTED] at which time the site was complete. No apparent changes were observed at the site between [REDACTED] [REDACTED] (Figure 3).

25X1D

25X1D

25X1D

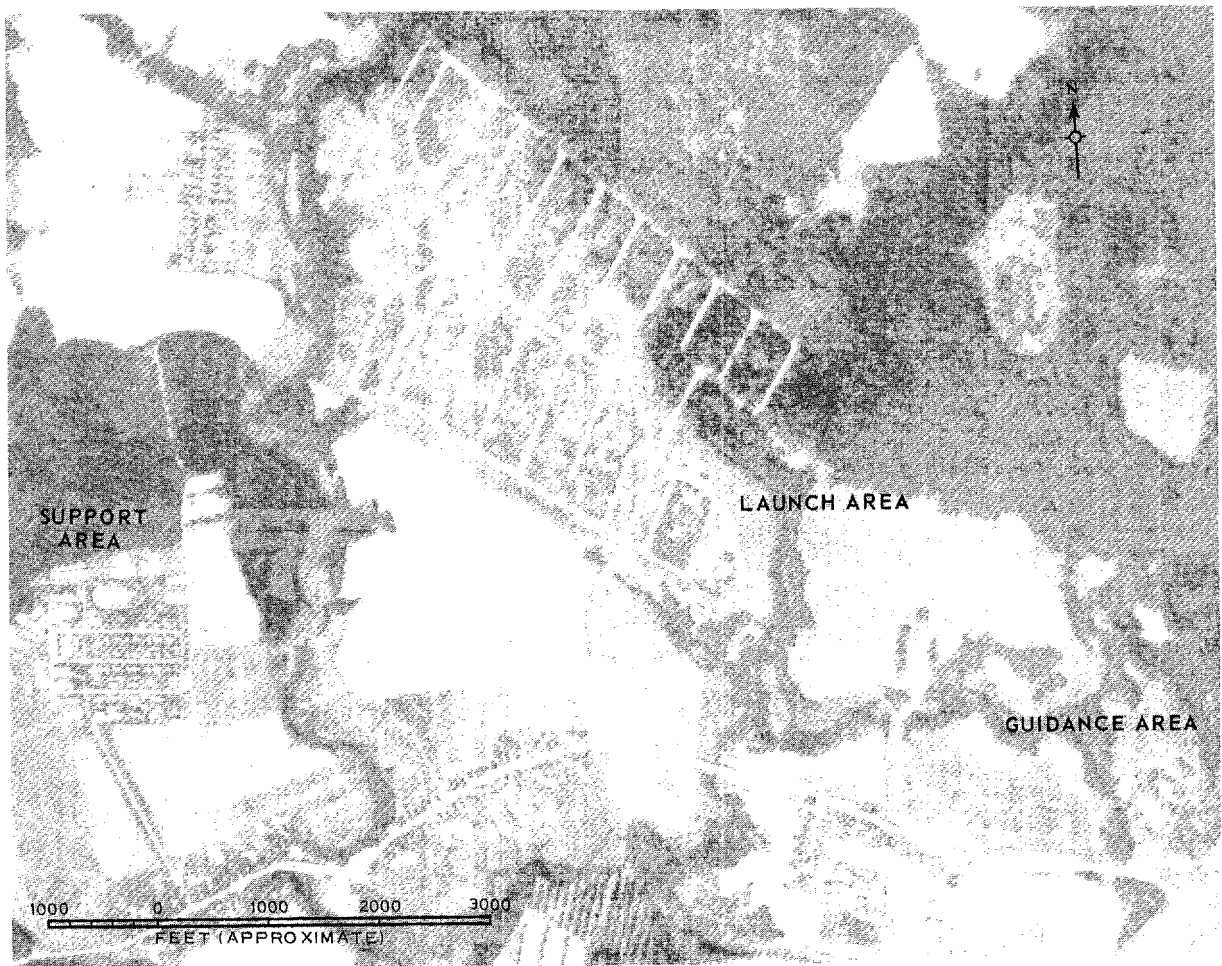


FIGURE 3. MOSCOW SAM SITE C30-1, [REDACTED]

25X1D

25X1D

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MOSCOW SAM SITE C31-1

NPIC Target No: 0154-97-C

Coords: 56-02N 37-00E

Map Ref: DIA Sheet 0154-22HL, Mar 63 (S)

First KEYHOLE coverage: [REDACTED]

Status then: undetermined because of haze and darkness

The first clear coverage of the site on KEYHOLE photography was in [REDACTED] at which time the site was complete. At that time, a possible small-arms range (Figure 4, Item 1) was observed at the northwest edge of the support area. No apparent changes were observed at the site between [REDACTED]

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)

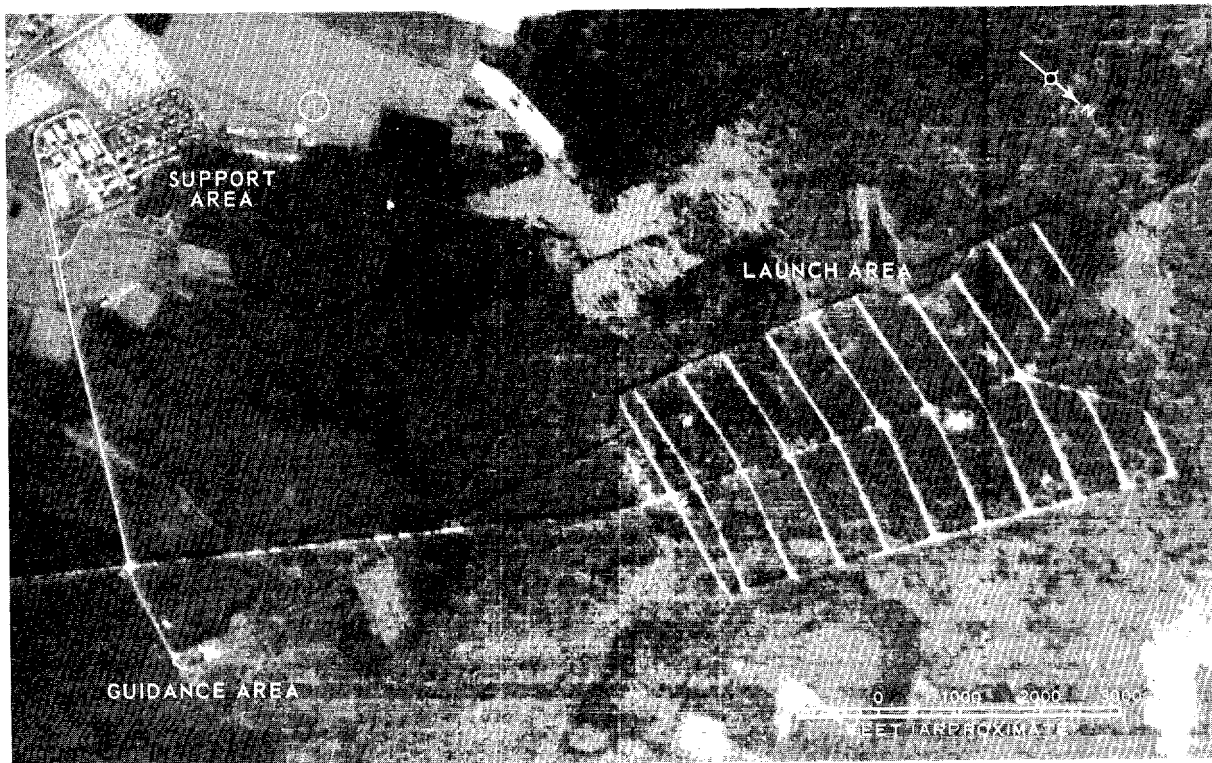
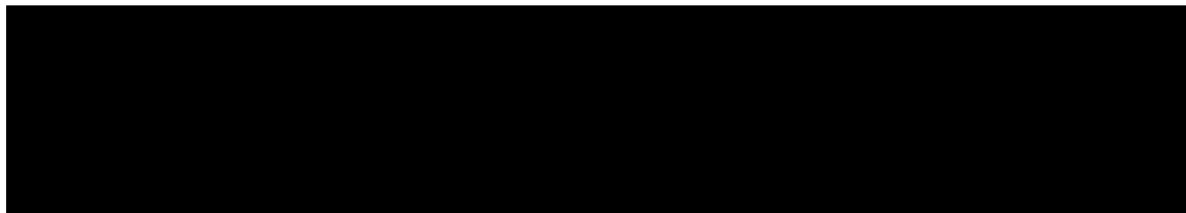


FIGURE 4. MOSCOW SAM SITE C31-1, [REDACTED]

NPIC/R-81/64

MOSCOW SAM SITE C33-1

25X1A

NPIC Target No: 0154-97-D

Coords: 56-07N 37-11E

Map Ref: DIA Sheet 0154-22HL, Mar 63 (S)

First KEYHOLE coverage: [REDACTED]

Status then: identification only because of haze and darkness

The first clear coverage of the site on KEYHOLE photography was in [REDACTED] at which time the site was complete. A long rectangular ditch on the west edge of the support area (Figure 5, Item 1) was first observed on [REDACTED]. A large earth-graded area (Item 2), not present on photography of [REDACTED] was observed in [REDACTED].

25X1D

25X1D

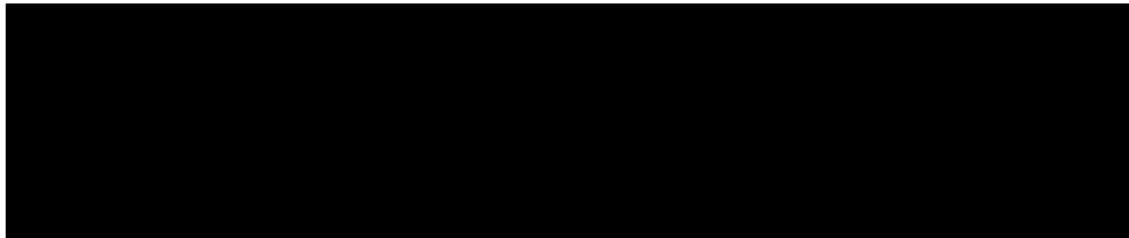
25X1D

25X1D

25X1D

25X1D

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)



25X1D

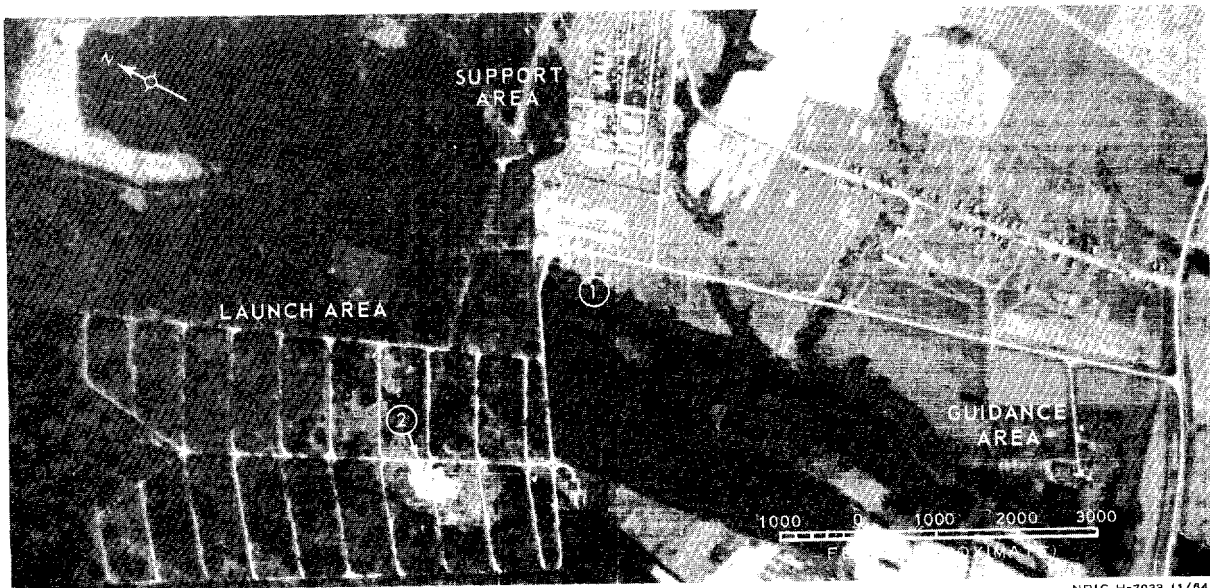


FIGURE 5. MOSCOW SAM SITE C33-1, [REDACTED]

25X1D

TOP SECRET RUFF

MOSCOW SAM SITE C35-1

NPIC Target No: 0154-97-E

Coords: 56-09N 37-23E

Map Ref: DIA Sheet 0154-221IL, Mar 63 (S)

First KEYHOLE coverage:

Status then: identification only because of haze,

darkness, and cloud shadow

The first clear coverage of the site on KEYHOLE photography was in [REDACTED] at which time the site was complete. No apparent changes were observed at the site between [REDACTED] (Figure 6).

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)

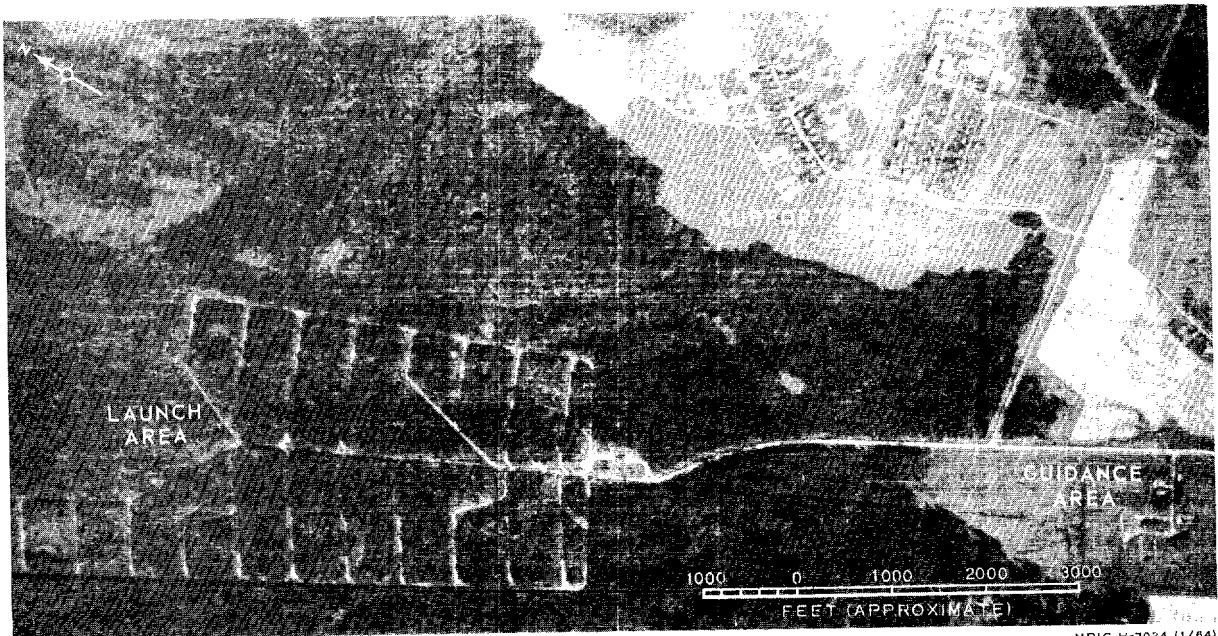


FIGURE 6. MOSCOW SAM SITE C35-1, [REDACTED]

NPIC/R-81/64

MOSCOW SAM SITE C36-1

25X1A

[REDACTED]
NPIC Target No: 0154-97-F

Coords: 56-12N 37-36E

Map Ref: DIA Sheet 0154-23HL, Apr 63 (S)

First KEYHOLE coverage: [REDACTED]

25X1D

25X1D

[REDACTED]
Status then: undetermined because of haze and darkness

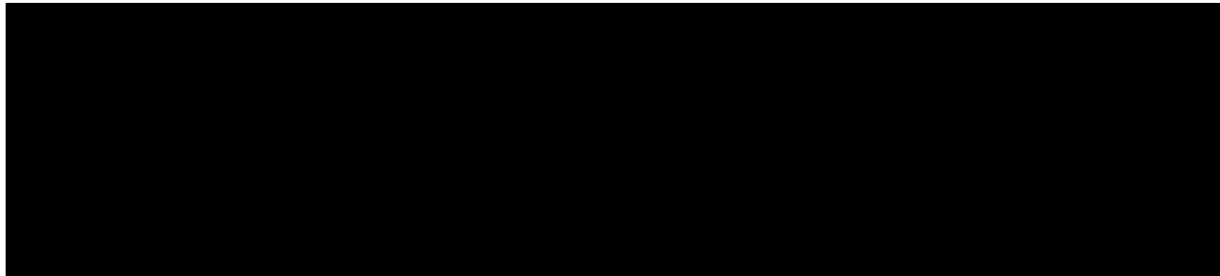
The first clear coverage of the site on KEY-

HOLE photography was in [REDACTED] at which time the site was complete. At that time, a separate secured storage area (Figure 7, Item 1) was observed with nine drive-through missile checkout/storage buildings, each approximately 310 by 100 feet, and a large clearing (Item 2) with one possible mounded structure. No apparent changes were observed at the site between [REDACTED]

25X1D

25X1D

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)



25X1D

NPIC/R-81/64

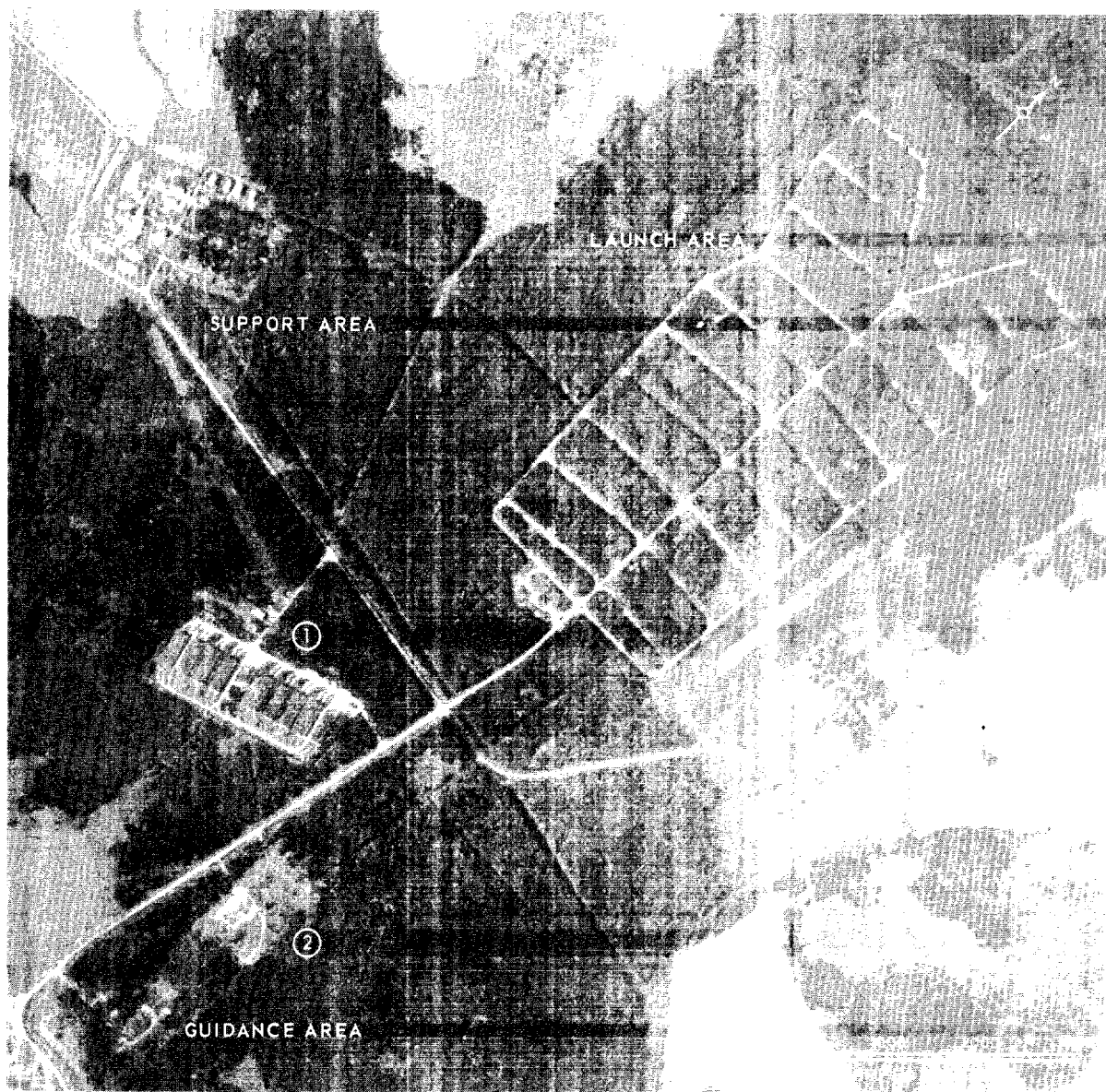


FIGURE 7. MOSCOW SAM SITE C36-1, [REDACTED]

NPIC H-7025 (1/64)

25X1D

TOP SECRET RUFF

NPIC/R-81/64

MOSCOW SAM SITE E28-1

25X1A

NPIC Target No: 0167-122-R

Coords: 55-52N 36-17E

Map Ref: DIA Sheet 0167-4HL, Mar 63 (S)

First KEYHOLE coverage:

25X1D

25X1D

Status then: undetermined because of haze and darkness

The first clear coverage of the site on KEY-

HOLE photography was in [REDACTED] at which time the site was complete. No apparent changes were observed at the site between [REDACTED] (Figure 8).

Collocated with the SA-1 site is SA-3 SAM Site E28-3 [REDACTED] of the F configuration. The SA-3 site (Item 1), which was first observed under construction in [REDACTED] had been completed by [REDACTED]

25X1D

25X1D

25X1D

25X1A

25X1D

25X1D

25X1D

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)

25X1D

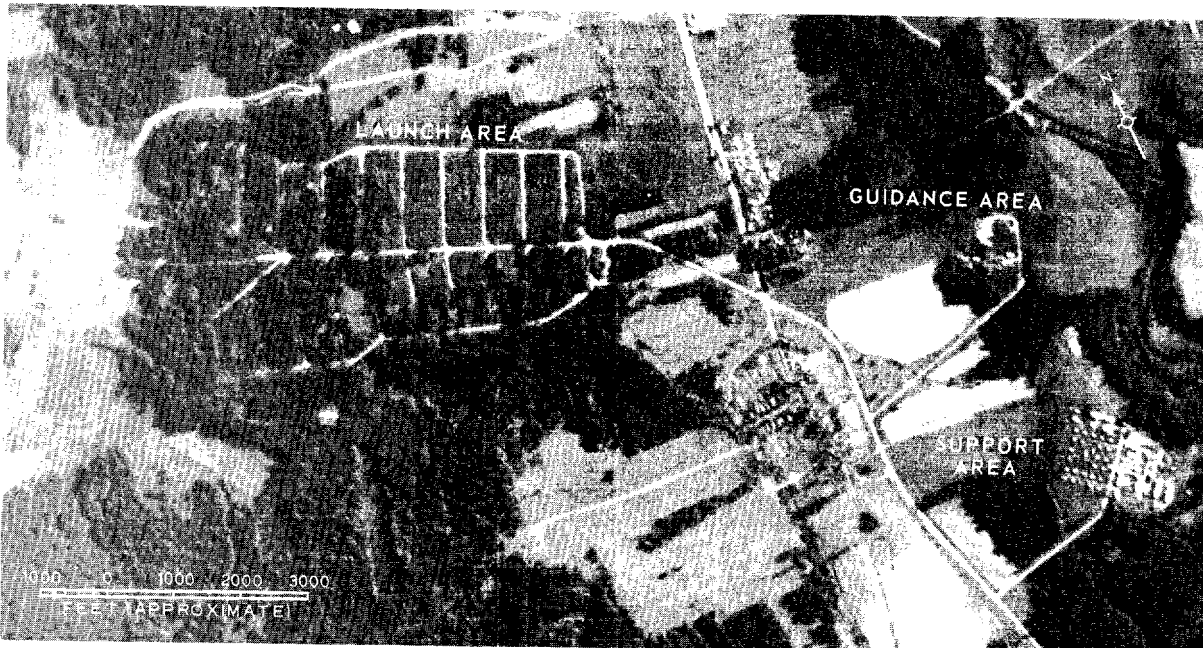


FIGURE 8. MOSCOW SAM SITE E28-1

NPIC H-7026 (1/64)

25X1D

TOP SECRET RUFF

NPIC/R-81/64

MOSCOW SAM SITE E30-1

25X1A

NPIC Target No: 0154-98-G

Coords: 56-01N 36-20E

Map Ref: DIA Sheet 0154-22HL, Mar 63 (S)

First KEYHOLE coverage: [REDACTED]

25X1D

25X1D

Status then: identification only because of haze and darkness

The first clear coverage of the site on KEY-

HOLE photography was in [REDACTED] at which time the site was complete. No apparent changes were observed at the site (Figure 9) between [REDACTED]

25X1D

25X1D

Collocated with the SA-1 site is SA-3 SAM Site E29-3 [REDACTED] of the F configuration. The SA-3 site (Item 1) was complete in [REDACTED]

25X1A

25X1D

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)

25X1D

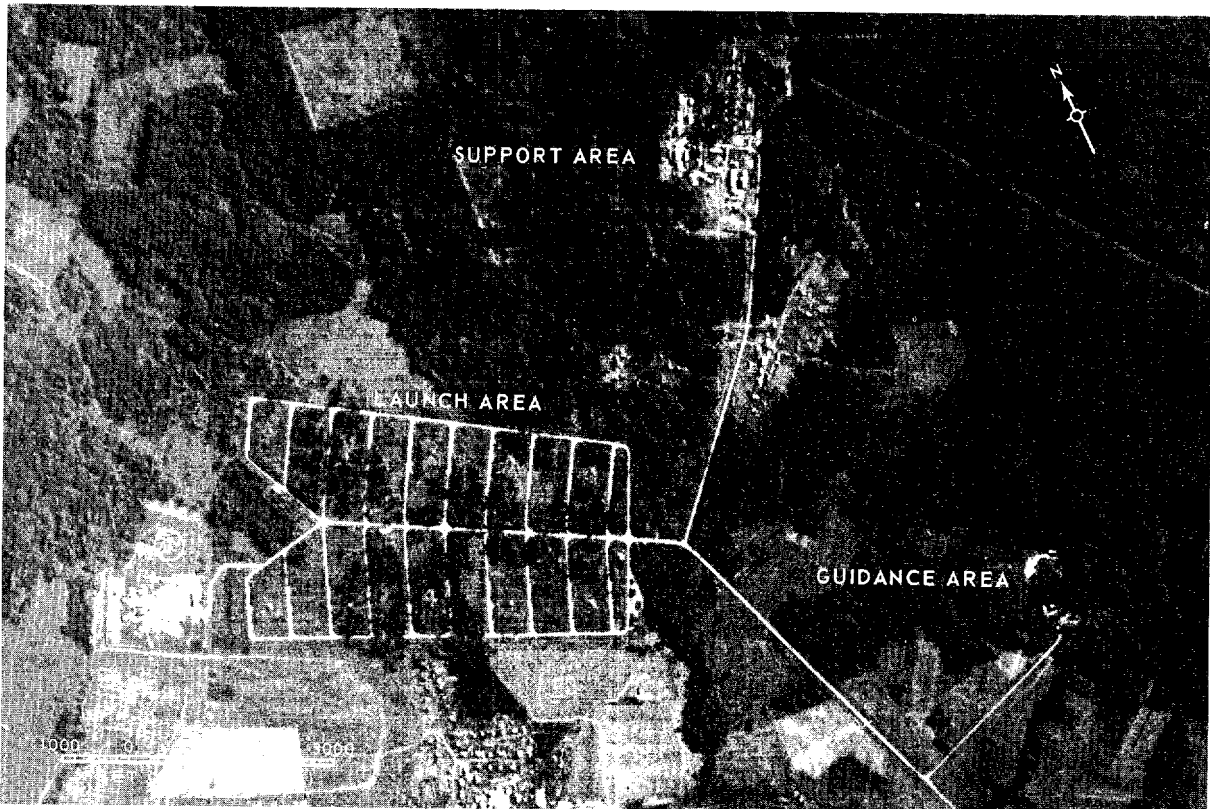


FIGURE 9. MOSCOW SAM SITE E30-1, [REDACTED]

NPIC H-7027 (1/64)

25X1D

TOP SECRET RUFF

NPIC/R-81/64

MOSCOW SAM SITE E31-1

25X1A

[REDACTED]
NPIC Target No: 0154-98-H

Coords: 56-07N 36-29E

Map Ref: DIA Sheet 0154-22HL, Mar 63(S)

First KEYHOLE coverage: [REDACTED]

[REDACTED]
Status then: identification only because of haze and darkness

The first clear coverage of the site on KEYHOLE photography was in [REDACTED] at which time the site was complete. By [REDACTED] five support-type buildings (Figure 10, Item 1) had been constructed on the north side of the support area. No other apparent changes were observed at the site between [REDACTED]

25X1D

25X1D

25X1D

25X1D

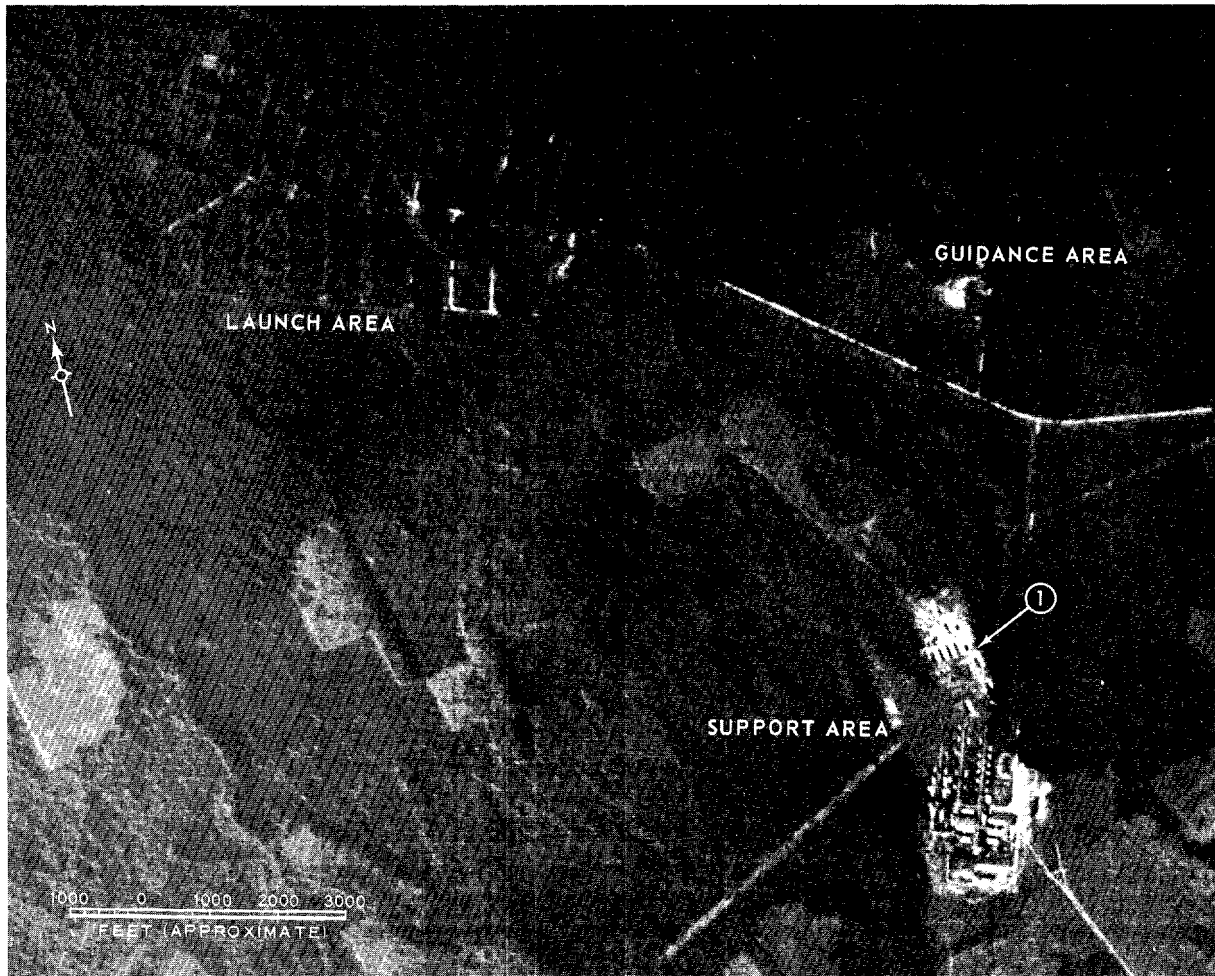


FIGURE 10. MOSCOW SAM SITE E31-1, [REDACTED]

NPIC H-7025 (1/64)

25X1D

TOP SECRET RUFF

25X1D

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MOSCOW SAM SITE E32-1

25X1A

NPIC Target No: 0154-98-1

Coords: 56-15N 36-37E

Map Ref: DIA Sheet 0154-22HL, Mar 63 (S)

First KEYHOLE coverage: [REDACTED]

Status then: undetermined because of haze and darkness

The first clear coverage of the site on KEYHOLE photography was in [REDACTED] at which

time the site was complete. No apparent changes were observed at the site between [REDACTED]

(Figure 11).

Collocated with the SA-1 site is SA-3 SAM site E32-3 [REDACTED] of the G configuration. The SA-3 site (Item 1) was first observed under construction in [REDACTED] was in the late stages of construction when seen in [REDACTED]

25X1D

25X1D

25X1A

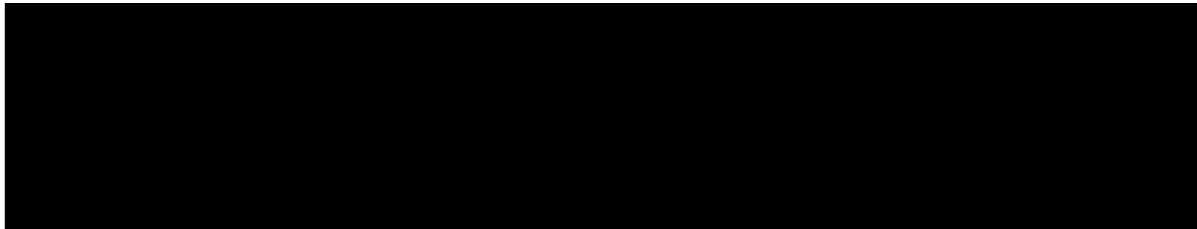
25X1D

25X1D

25X1D
25X1D

25X1D

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)



25X1D

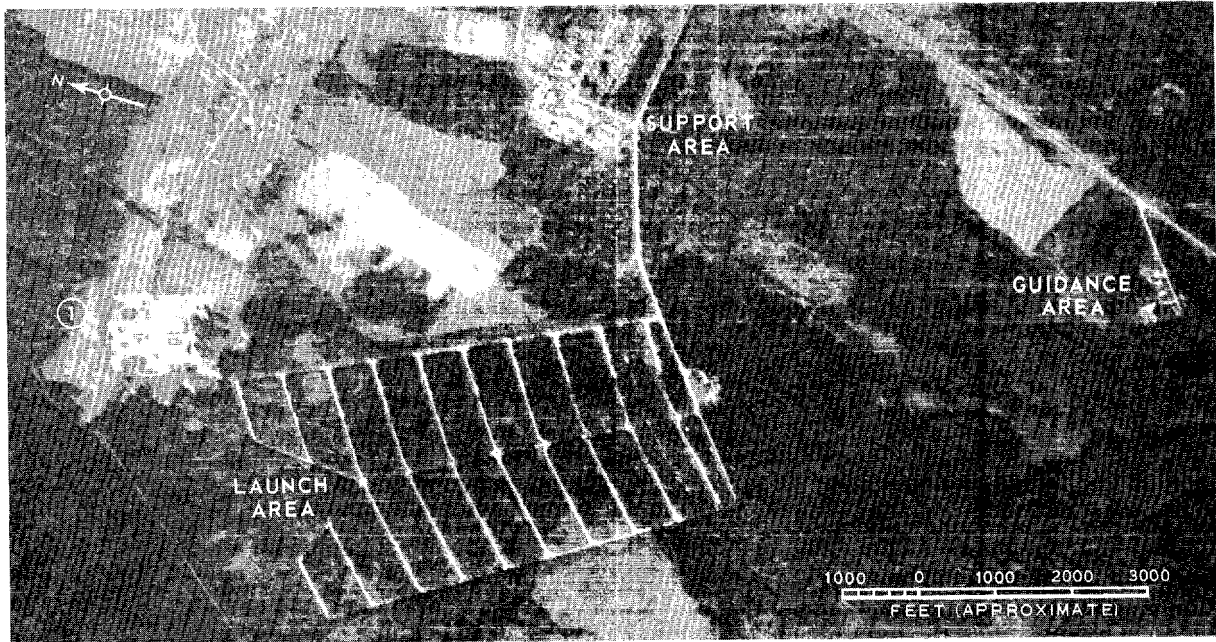


FIGURE 11. MOSCOW SAM SITE E32-1. [REDACTED]

NPIC H-7029 (1/64)

25X1D

MOSCOW SAM SITE E33-1

25X1A

NPIC Target No: 0154-98-J

Coords: 56-20N 36-48E

Map Ref: DIA Sheet 0154-22HL, Mar 63 (S)

First KEYHOLE coverage: [REDACTED]

25X1D

25X1D

Status then: identification only because of haze and darkness

25X1D

The first clear coverage of the site on KEYHOLE photography was in [REDACTED] at which time the site was complete. However, additional facilities were observed at the site. At that time, four buildings (Figure 12, Item 1), 195 by 40 feet, had been constructed in the support area. In [REDACTED] an access road was observed leading to construction activity at the northwest corner of the launch area. On photography of [REDACTED]

25X1D

25X1D

a fifth 195- by 40- foot building (Item 1) had been constructed in the support area. In [REDACTED]

25X1D

25X1D

two buildings possibly AMM associated (Items 2 and 3) each 100 by 100 feet with

a circular unidentified object in the center of each roof, had been constructed at the northwest corner of the launch area. Also, a rectangular building (Item 4), 225 by 125 feet, with an unidentified circular object positioned on the rear of the roof, was observed just northwest of the 100- by 100- foot buildings. An unidentified T-shaped ground pattern (Item 5) was observed 755 feet northeast of the rectangular building. In [REDACTED] two buildings, each approximately 140 by 30 feet, had been constructed on the crossbar of the T-shaped ground pattern. Three other buildings (Item 6), 110 by 70 feet, 75 by 50 feet, and 75 by 40 feet, were identified in [REDACTED] just west of the rectangular building.

25X1D

25X1D

In [REDACTED] a completed SA-3 SAM site, E33-3 [REDACTED] of the F configuration was observed north-northwest of the SA-1 launch area.

25X1D

25X1A

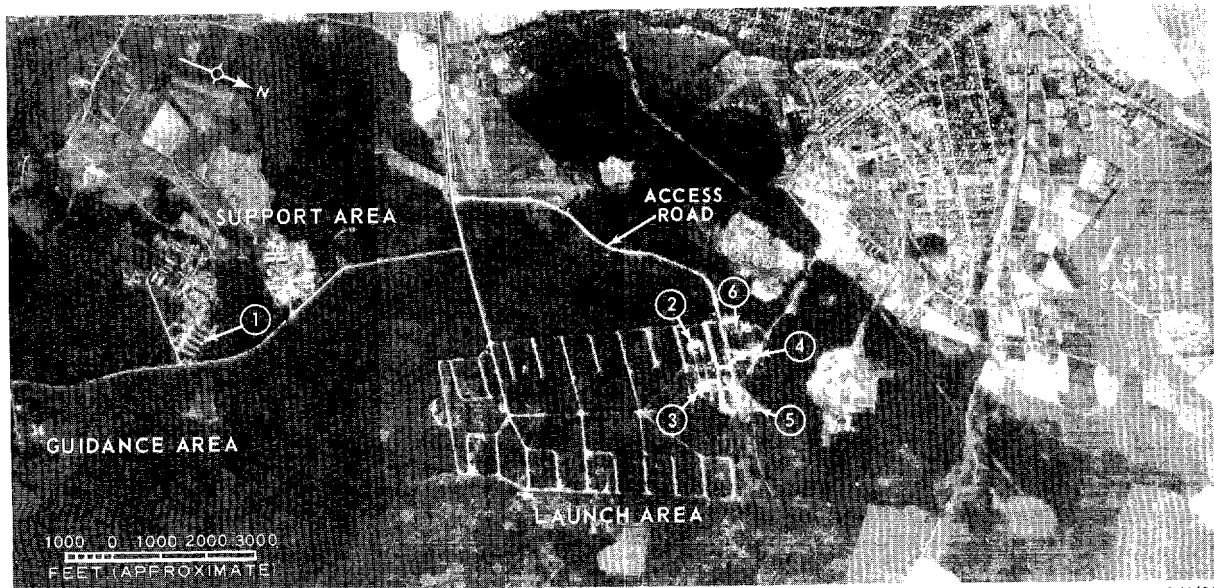


FIGURE 12. MOSCOW SAM SITE E33-1, [REDACTED]

NPIC H-7080 (1/64)

25X1D

25X1D

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Approved For Release 2001/03/03 : CIA-RDP78B04560A002100010023-0

MOSCOW SAM SITE E34-1

NPIC Target No: 0154-98-K

Coords: 56-24N 37-00E

Map Ref: DIA Sheet 0154-22HL, Mar 63 (S)

First KEYHOLE coverage: [REDACTED]

Status then: undetermined because of haze and darkness

The first clear coverage of the site on KEYHOLE photography was in [REDACTED] at which

time the site was complete. Except for a possible gravel pit (Figure 13, Item 1) north of the launch area, no significant changes were observed at the site between [REDACTED]

North of the SA-1 site and adjacent to the gravel pit is SA-3 SAM Site E34-3 [REDACTED]

The SA-3 site (Item 2), which was complete on photography of [REDACTED] has been identified as the F configuration.

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)

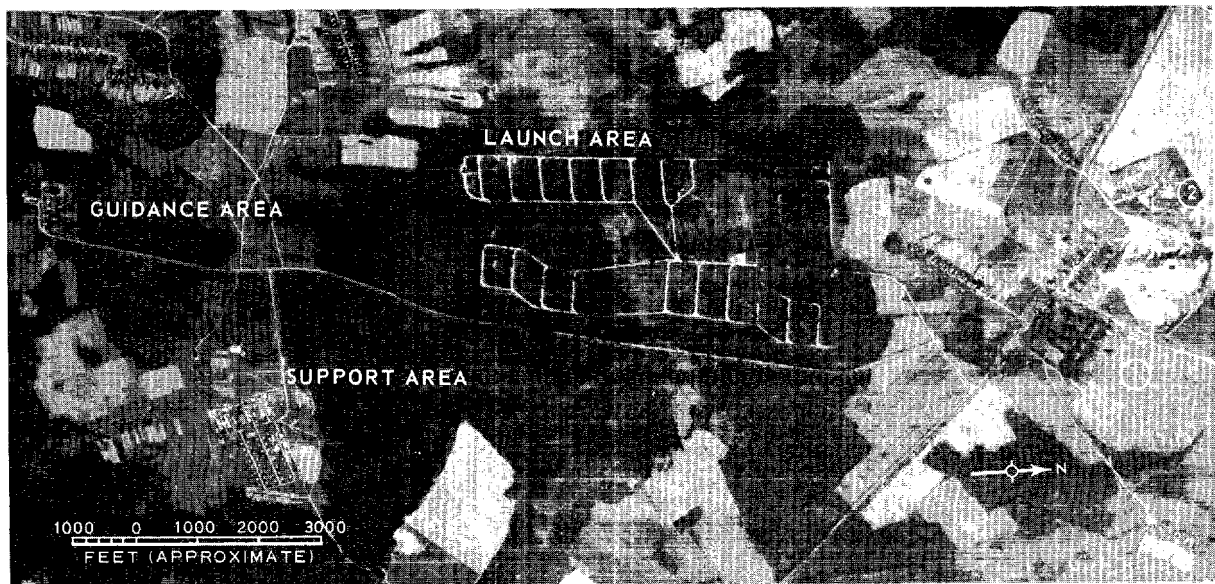
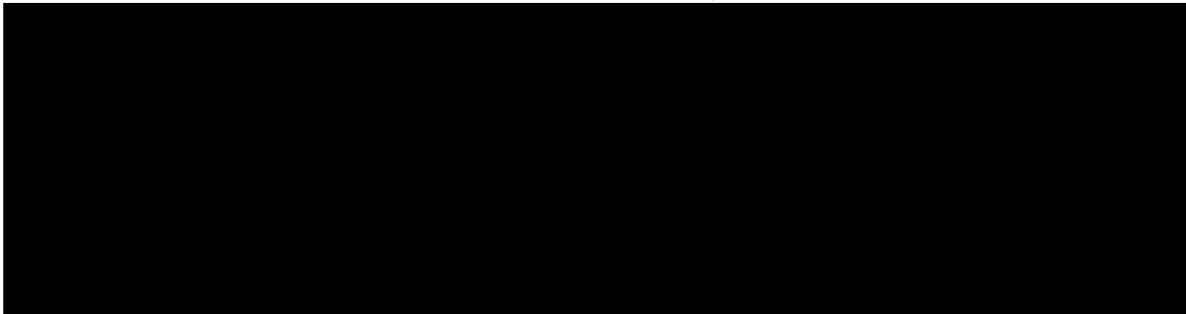


FIGURE 13. MOSCOW SAM SITE E34-1, [REDACTED]

MOSCOW SAM SITE E35-1

25X1A

NPIC Target No: 0154-98-L

Coords: 56-26N 37-10E

Map Ref: DIA Sheet 0154-22HL, Mar 63 (S)

First KEYHOLE coverage: [REDACTED]

Status then: identification only because of haze and darkness

The first clear coverage of the site on KEY-HOLE photography was in [REDACTED] at which

time the site was complete. No apparent changes were observed at the site between [REDACTED] (Figure 14).

Construction of SA-3 SAM Site E35-3 [REDACTED] northwest of the SA-1 launch area was first observed in [REDACTED]. The SA-3 site (Item 1), which has been identified as the F configuration, had been completed by [REDACTED]

25X1D

25X1D

25X1A

25X1A

25X1D

25X1D

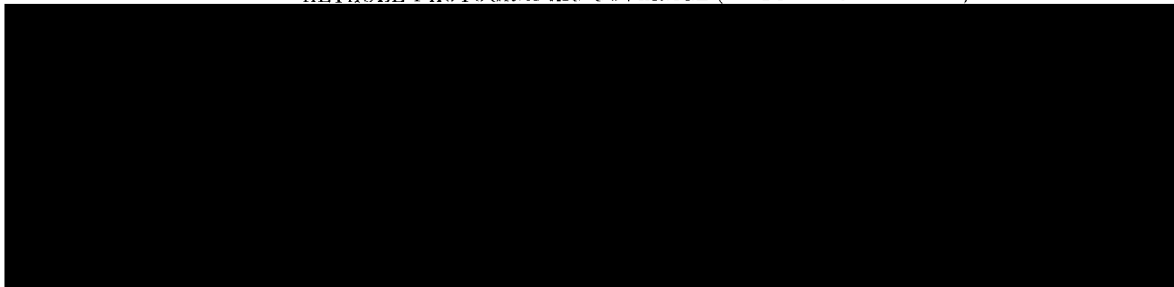
25X1D

25X1D

25X1D

25X1D

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)



25X1D

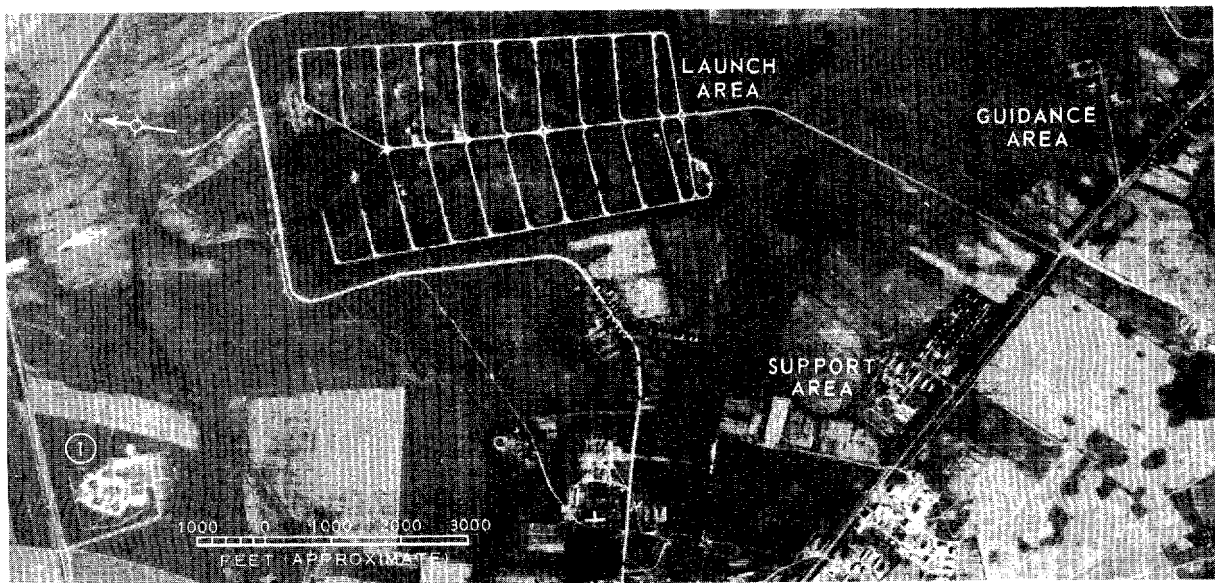


FIGURE 14. MOSCOW SAM SITE E35-1, [REDACTED]

NPIC H-7032 (1/64)

25X1D

MOSCOW SAM SITE E36-1

25X1A

[REDACTED]
NPIC Target No: 0154-98-M

Coords: 56-29N 37-28E

Map Ref: DIA Sheet 0154-23HL, Apr 63 (S)

First KEYHOLE coverage: [REDACTED]

Status then: identification only because of haze and darkness

The first clear coverage of the site on KEYHOLE photography was in [REDACTED] at which

time the site was complete. At that time, an unidentified, walled, grid configuration (Figure 15, Item 1) was observed under construction just west of the guidance area. In [REDACTED] a building (Item 2) was first observed under construction. As of [REDACTED] the construction status of both of these items was undetermined. On photography of [REDACTED] a linear ditch (Item 3) was first observed; it appeared unchanged in [REDACTED]

25X1D

25X1D

25X1D

25X1D

25X1D
25X1D

25X1D

KEYHOLE PHOTOGRAPHIC COVERAGE (all TOP SECRET RUFF)

25X1D



NPIC/R-81/64

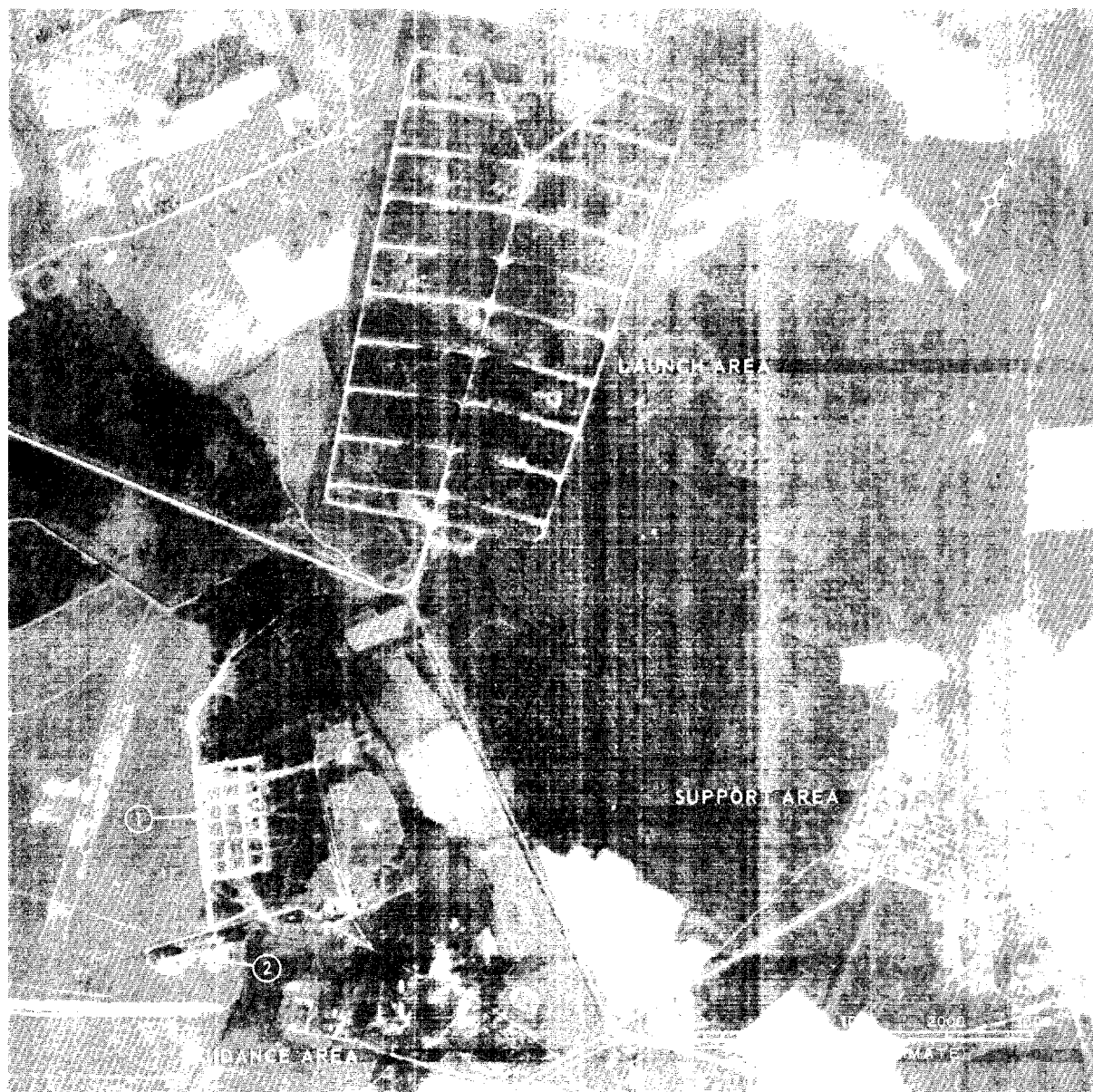


FIGURE 15. MOSCOW SAM SITE E36-1. [REDACTED]

25X1D

NPIC/R-81/64

REFERENCES

REQUIREMENT

CIA. RR3-80375

NPIC PROJECT

JN-212/62 (partial answer)

TOP SECRET